Demonstration of Three New Purdue Materials Databases on Thermophysical Properties of Matter, Microelectronic Packaging Materials, and Aerospace Structural Alloys

C. Gibson

Center for Information and Numerical Data Analysis & Synthesis (CINDAS)

Purdue University
1293 Potter Engineering Ctr.

West Lafayette, IN 47907-1293 U.S.A.

Three databases will be demonstrated: the Aerospace Structural Metals Handbook on CD Rom, the Microelectronics Packaging Materials Database and the Thermophysical Properties of Matter Database.

The Aerospace Structural Metals Handbook on CD Rom (a PDF databook) is an electronic version of the Aerospace Structural Metals Handbook. This resource has been published by Purdue University under a Cooperative Research and Development Agreement with the US Air Force since 1991. The handbook contains evaluated mechanical and thermophysical properties of 205 aerospace alloys. The databook is published on CD Rom.

The Microelectronics Packaging Materials Database is a self-contained database contains evaluated thermophysical, electrical and mechanical properties of over 3000 materials used in microelectronics packaging applications. The database was developed at Purdue University in 1987 and has been continuously upgraded since this time under the sponsorship of the Semiconductor Research Corporation.

The Thermophysical Properties of Matter Database is currently in development at Purdue University with the expectation of being ready for distribution by the 1st quarter of 2001. The database is an electronic version of the TPRC Data Series developed at Purdue University in the 1970's. This database contains evaluated thermophysical properties of thousands of materials. A development version of the database will be demonstrated.